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Figure 1A

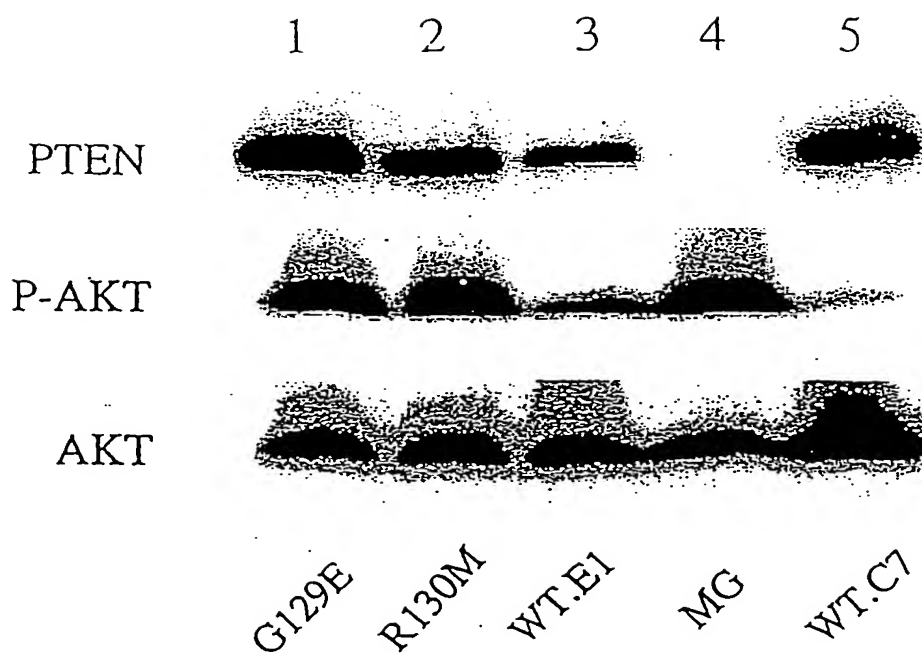


Figure 1B

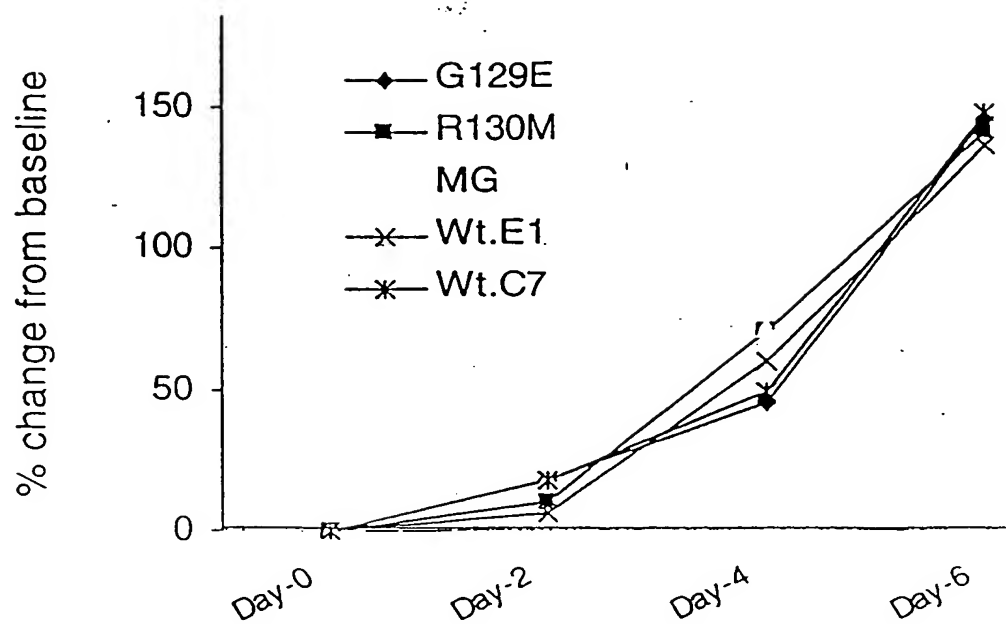


Figure 3A

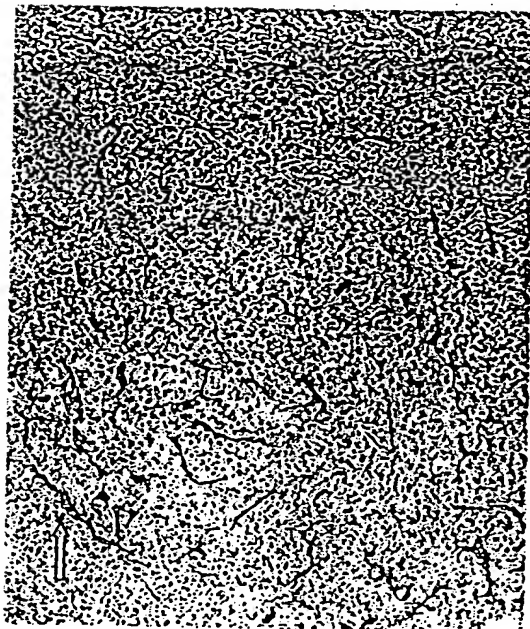


Figure 3B

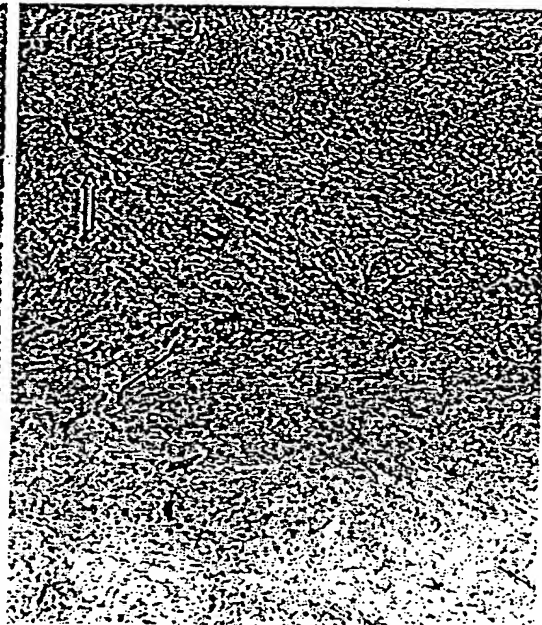


Figure 3C

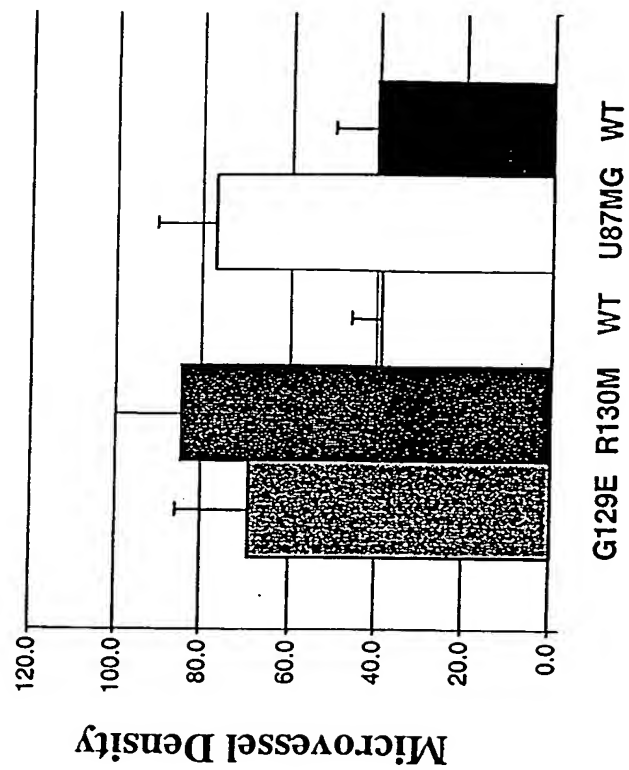


Figure 2A

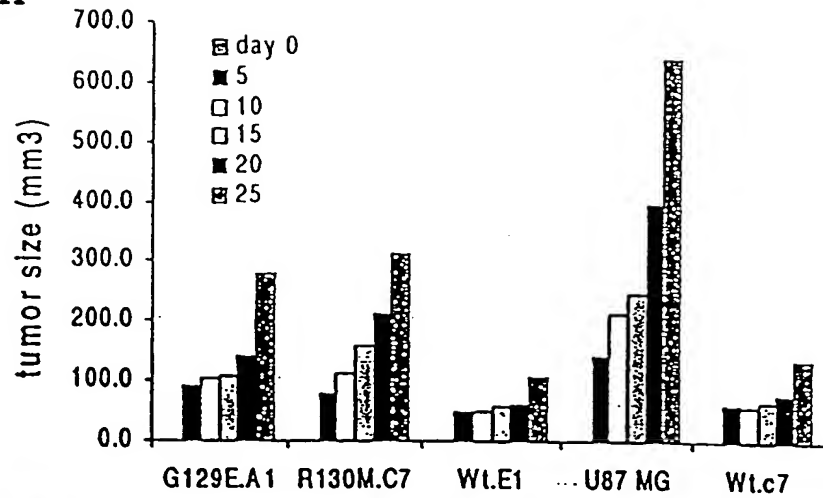


Figure 2B

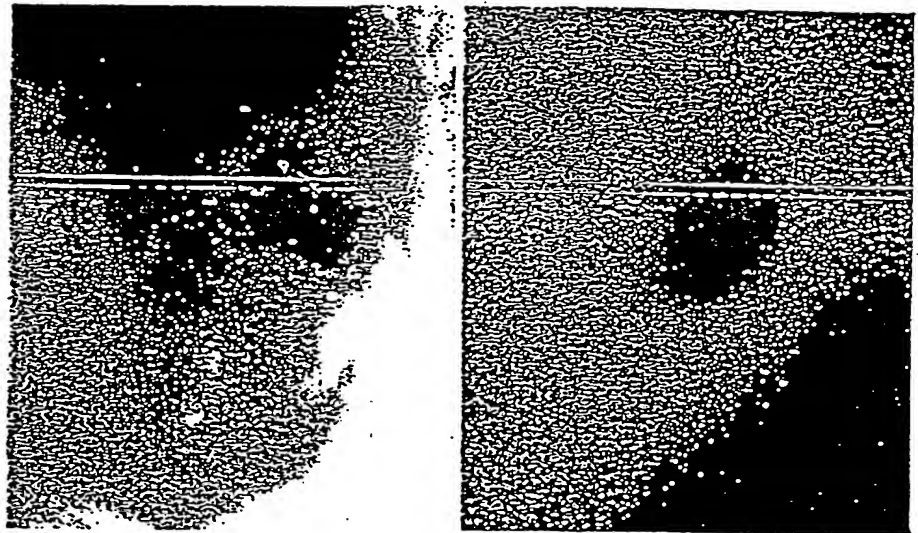


Figure 2C

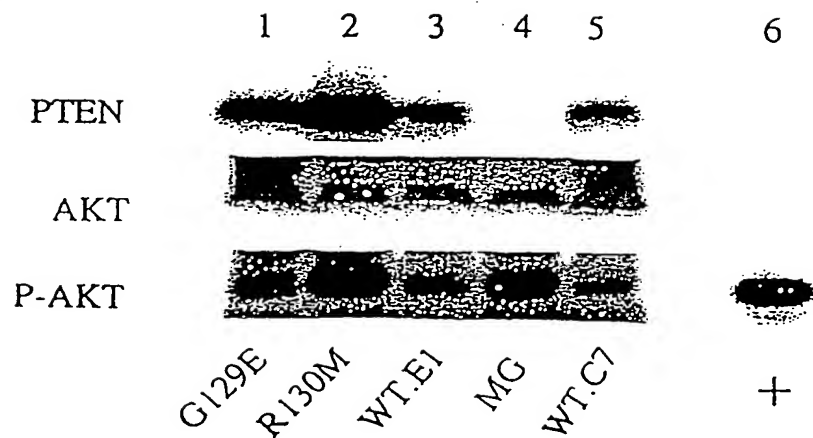


Figure 3D

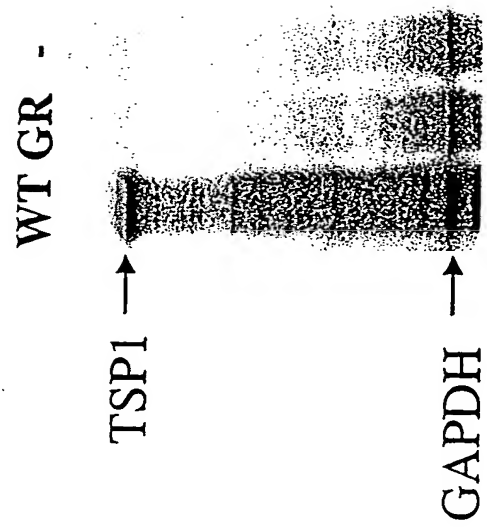


Figure 3E

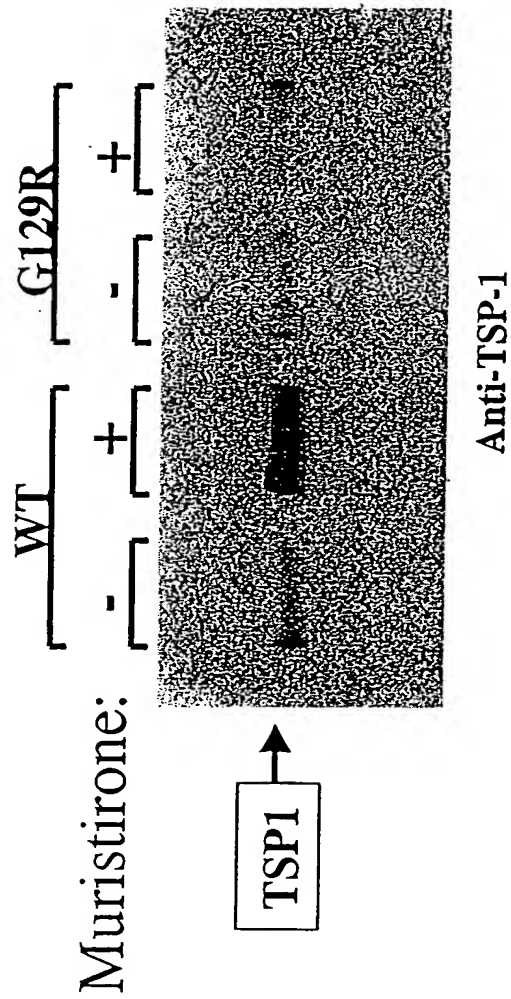


Figure 4

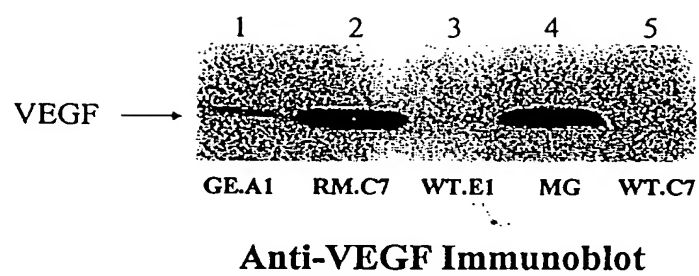


Figure 5A

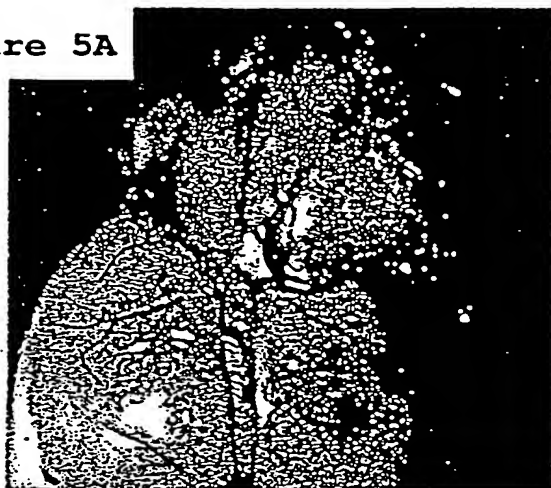


Figure 5B



Figure 5C



Figure 5D

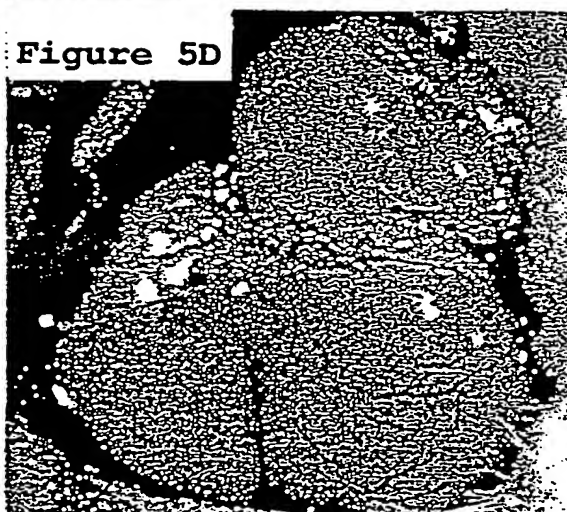


Figure 5E

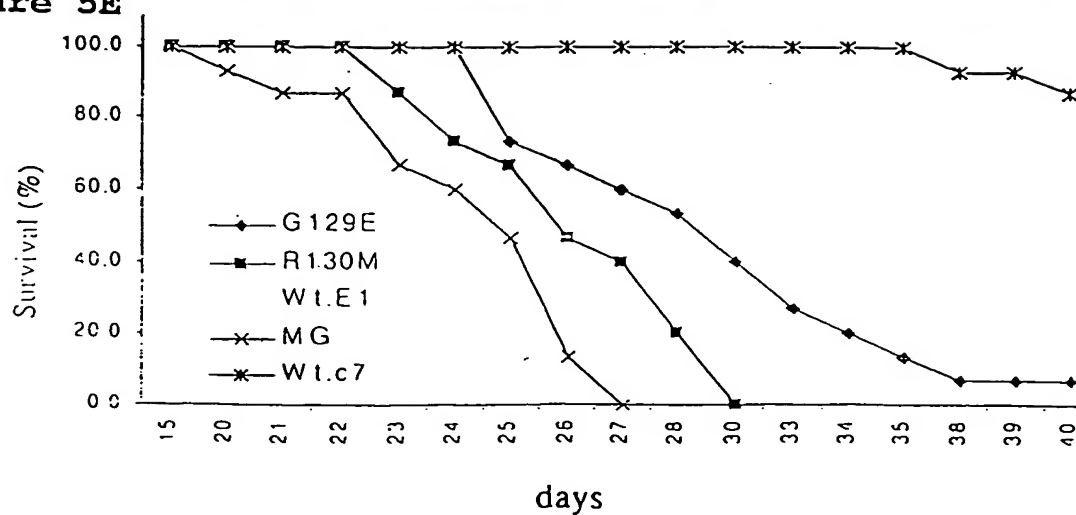


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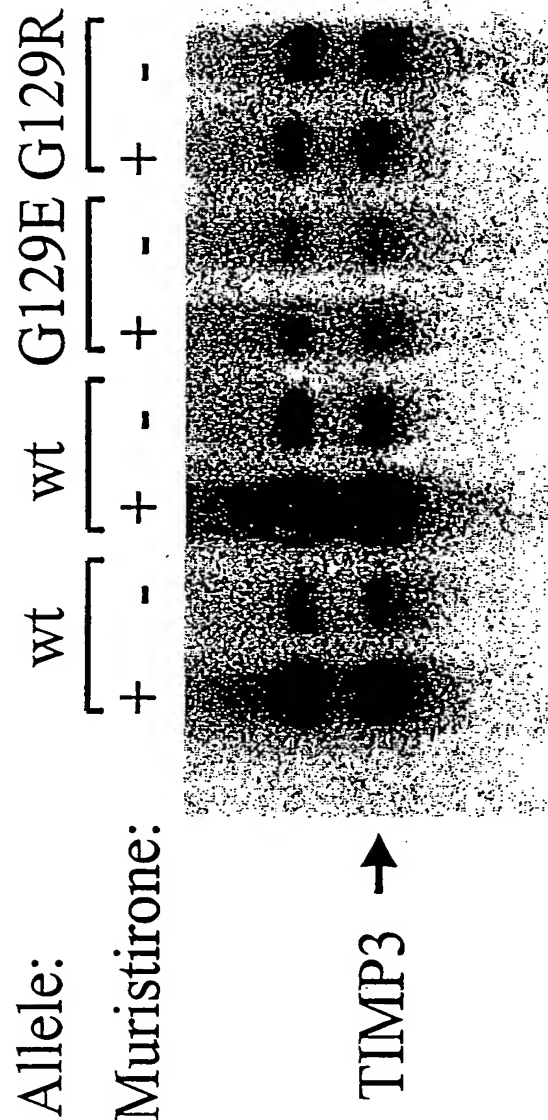


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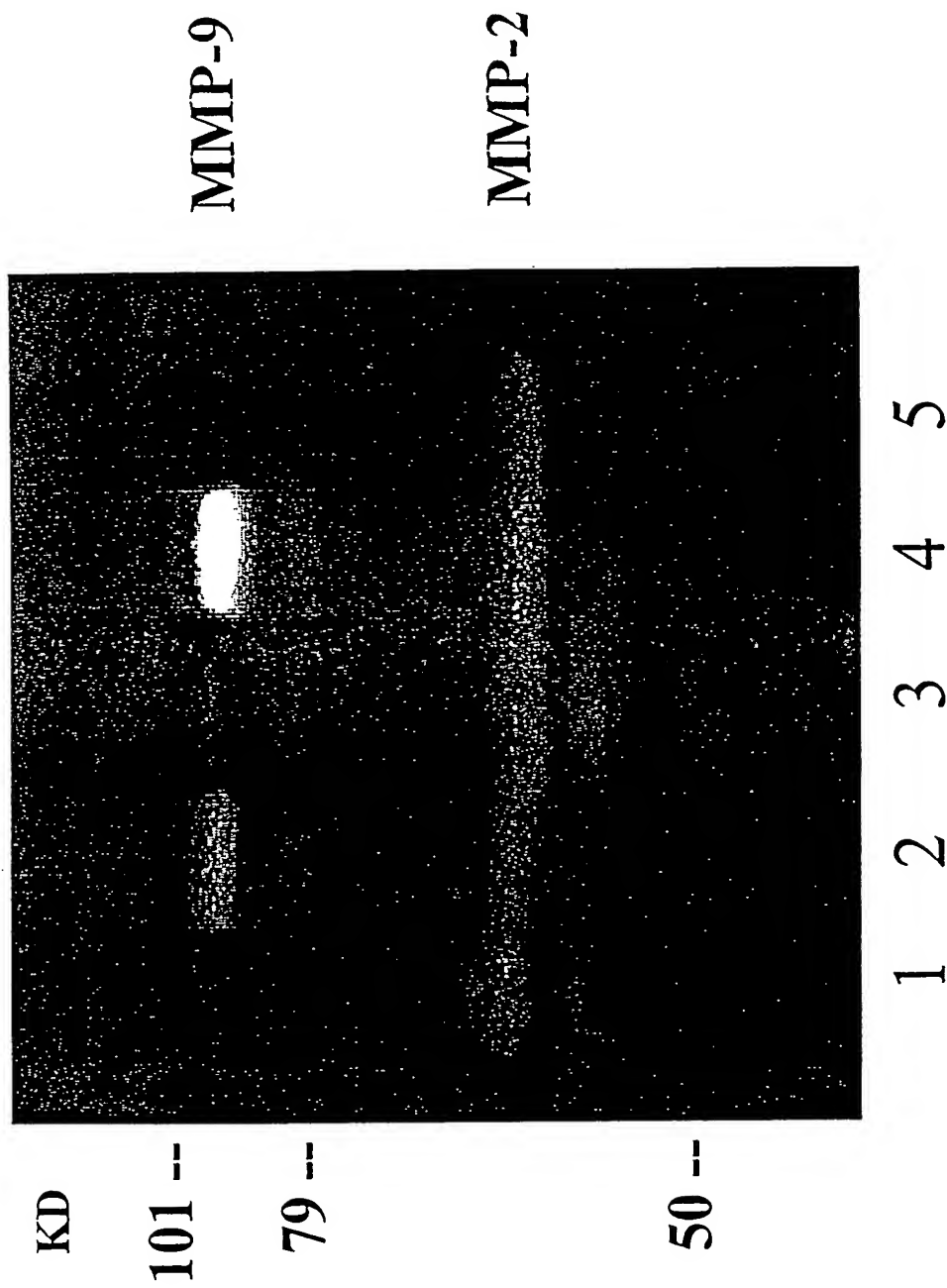


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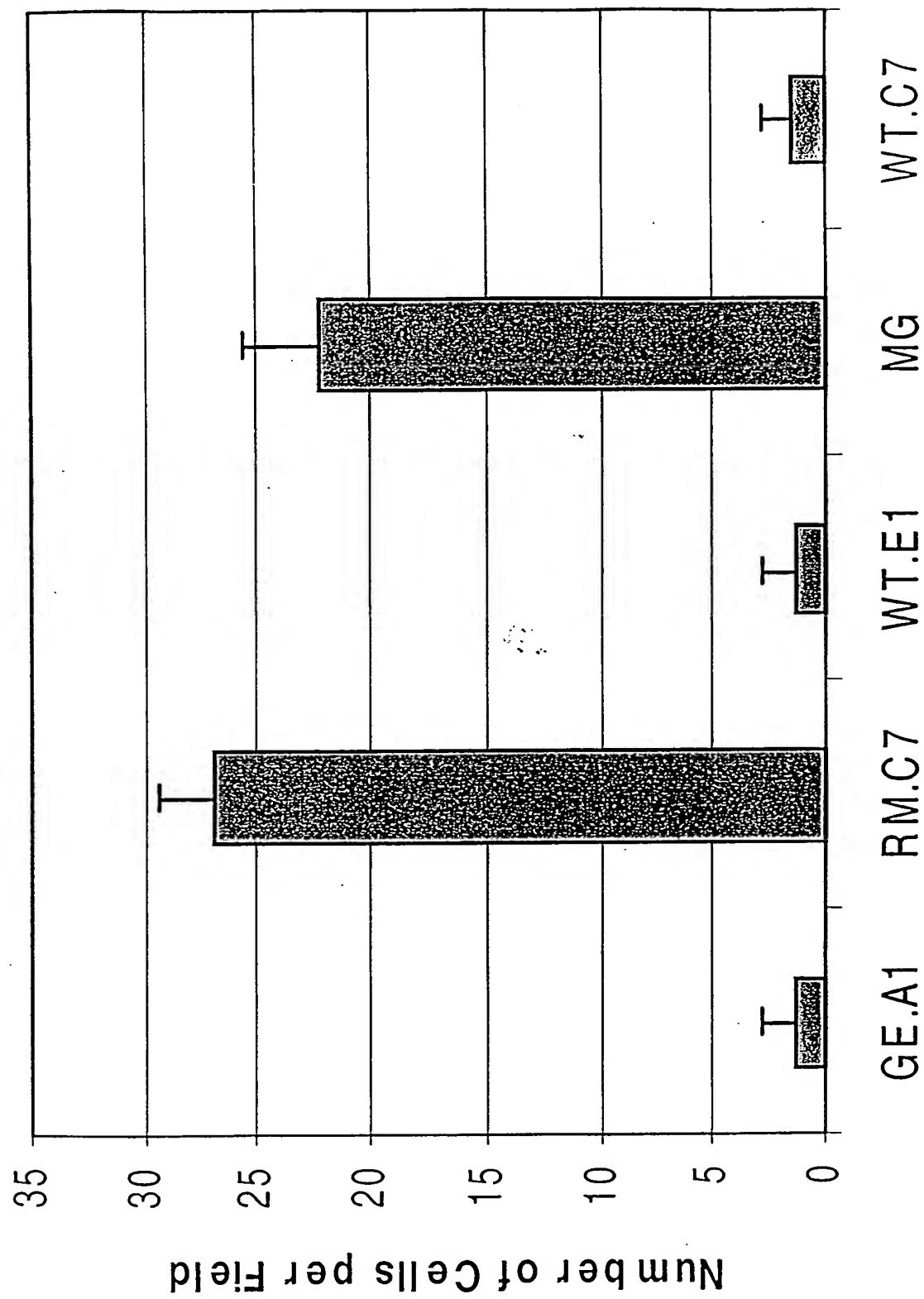


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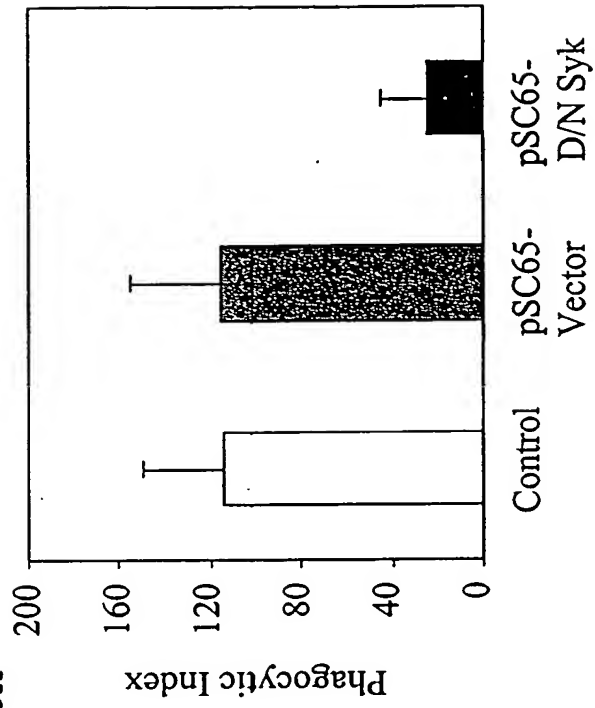


Figure 9B

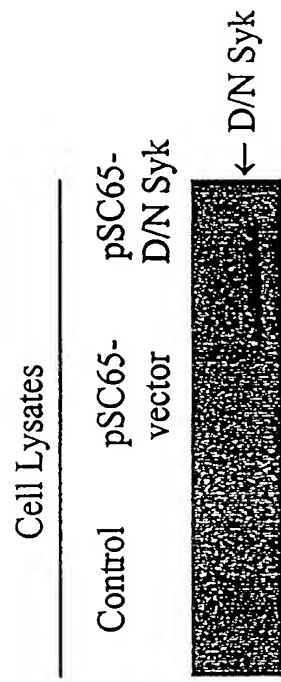


Figure 10A

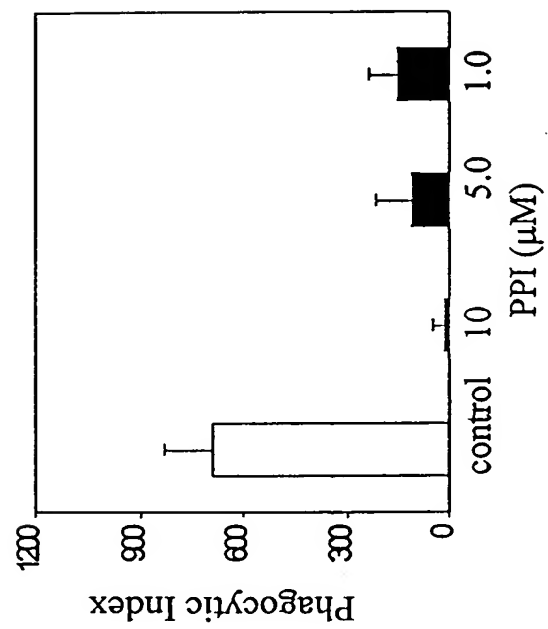


Figure 10B

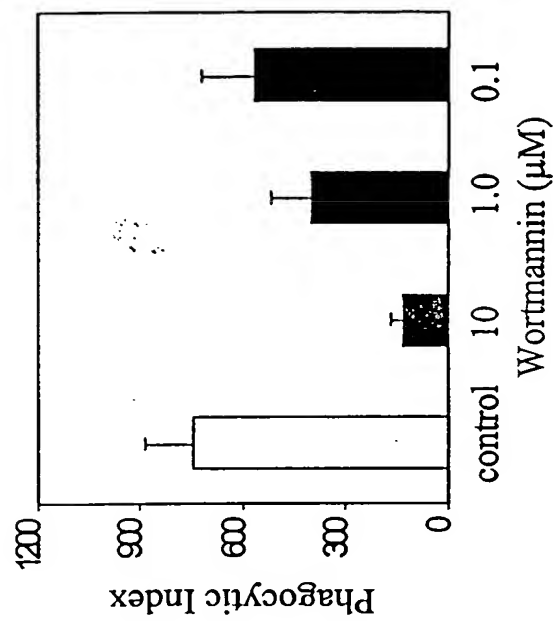


Figure 11A

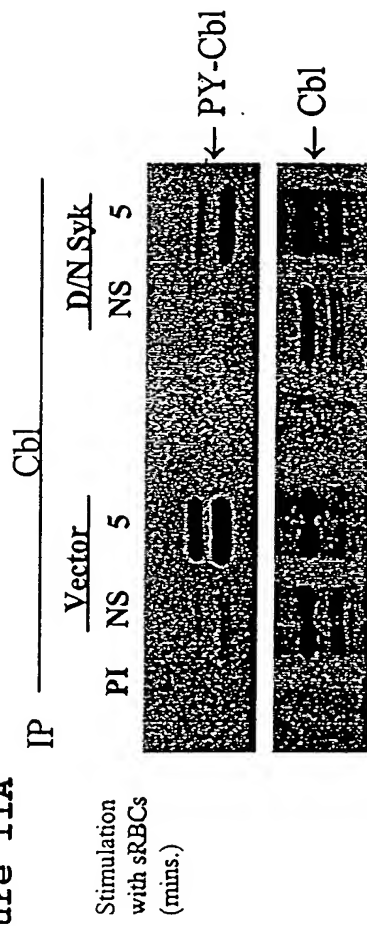


Figure 11B

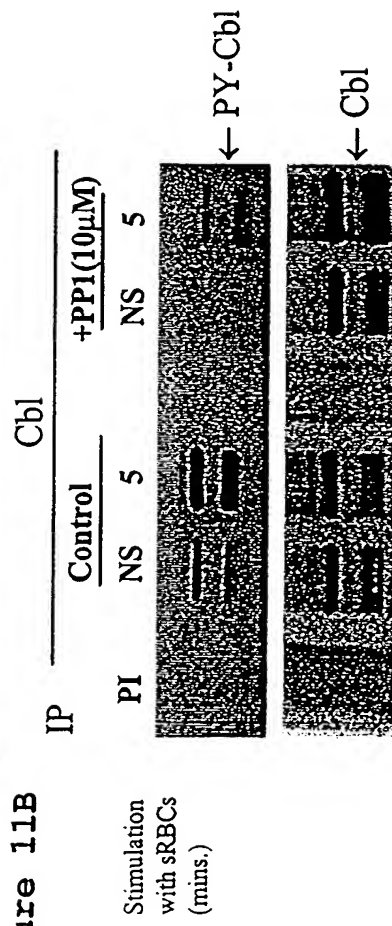


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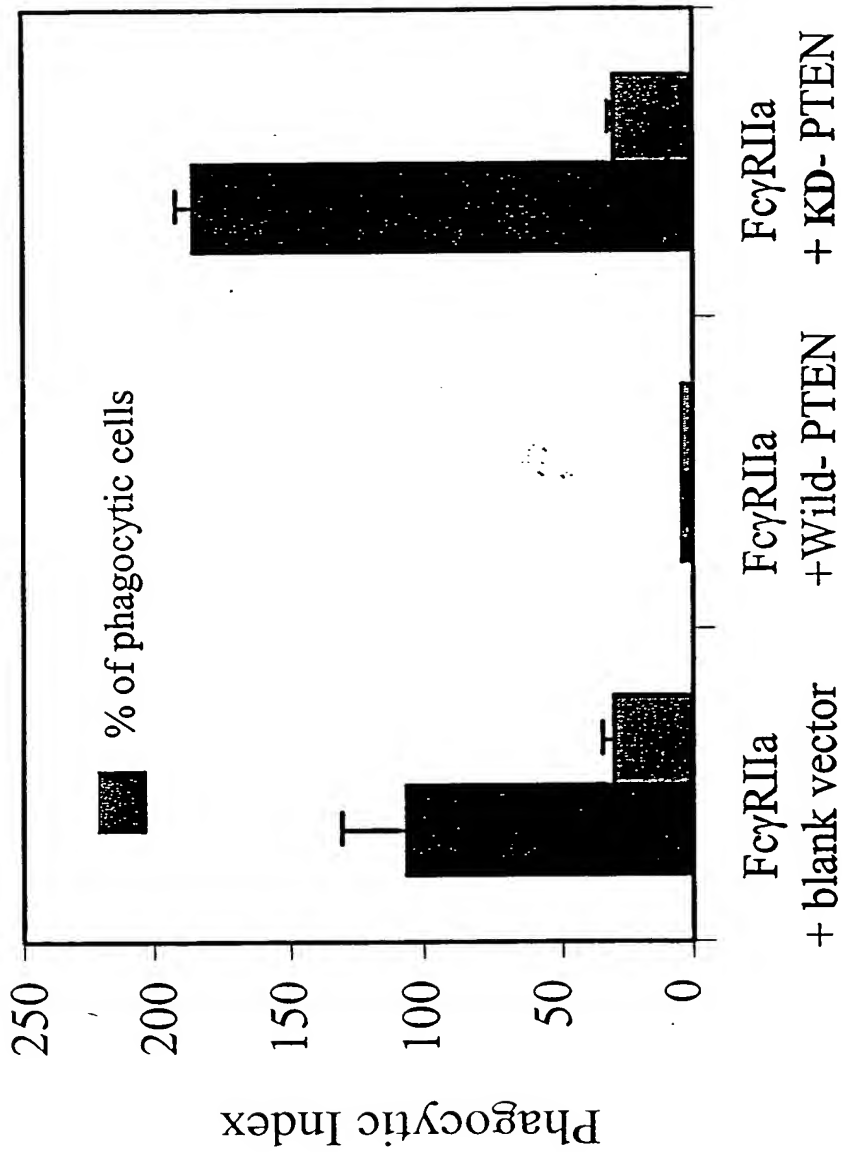


Figure 13

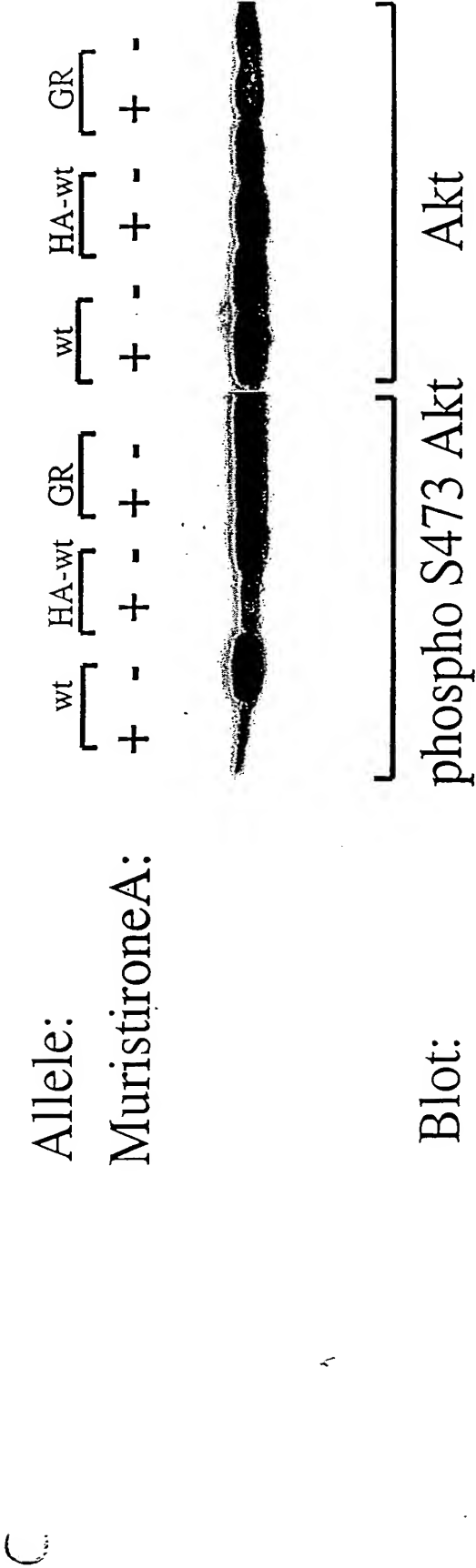


Figure 14

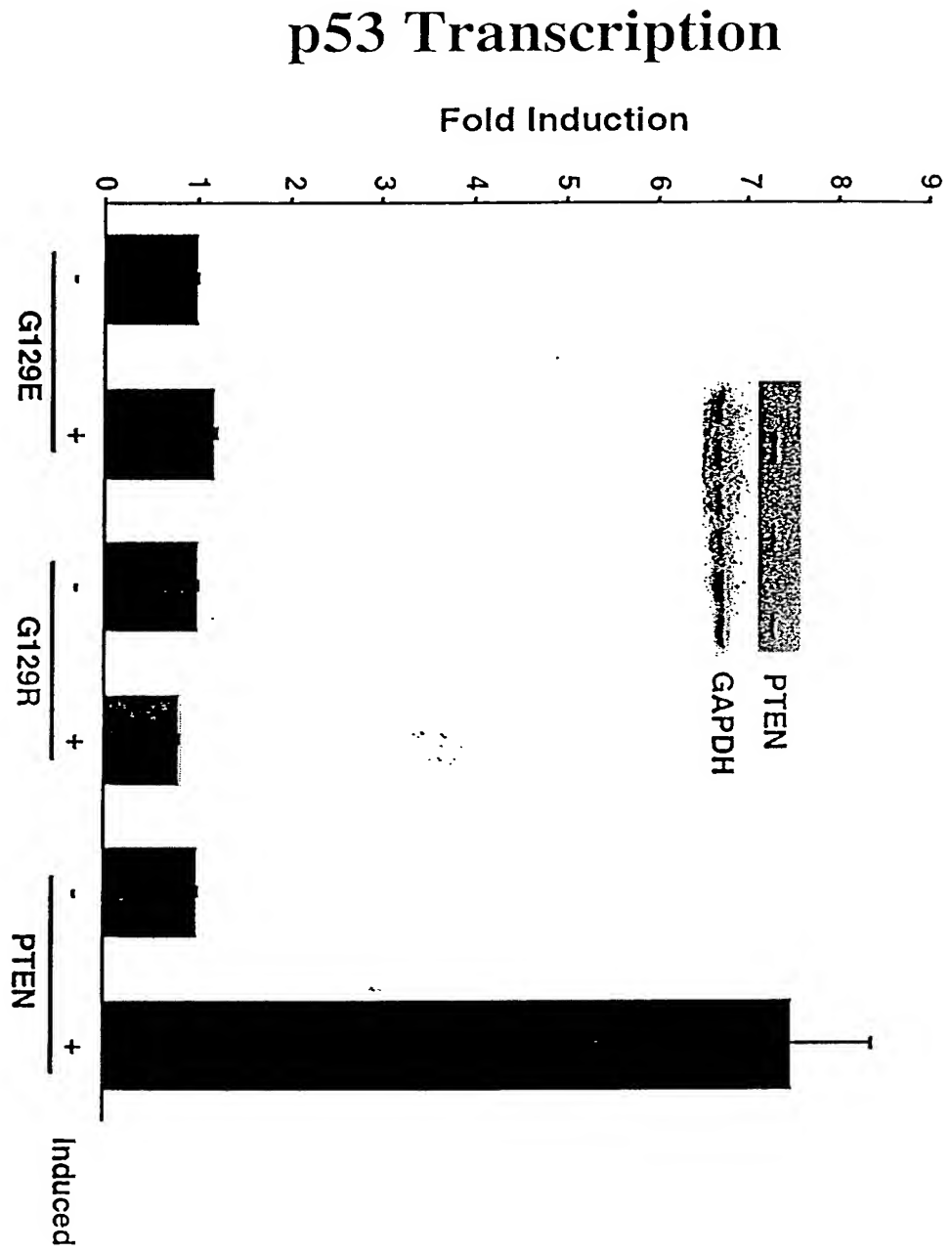


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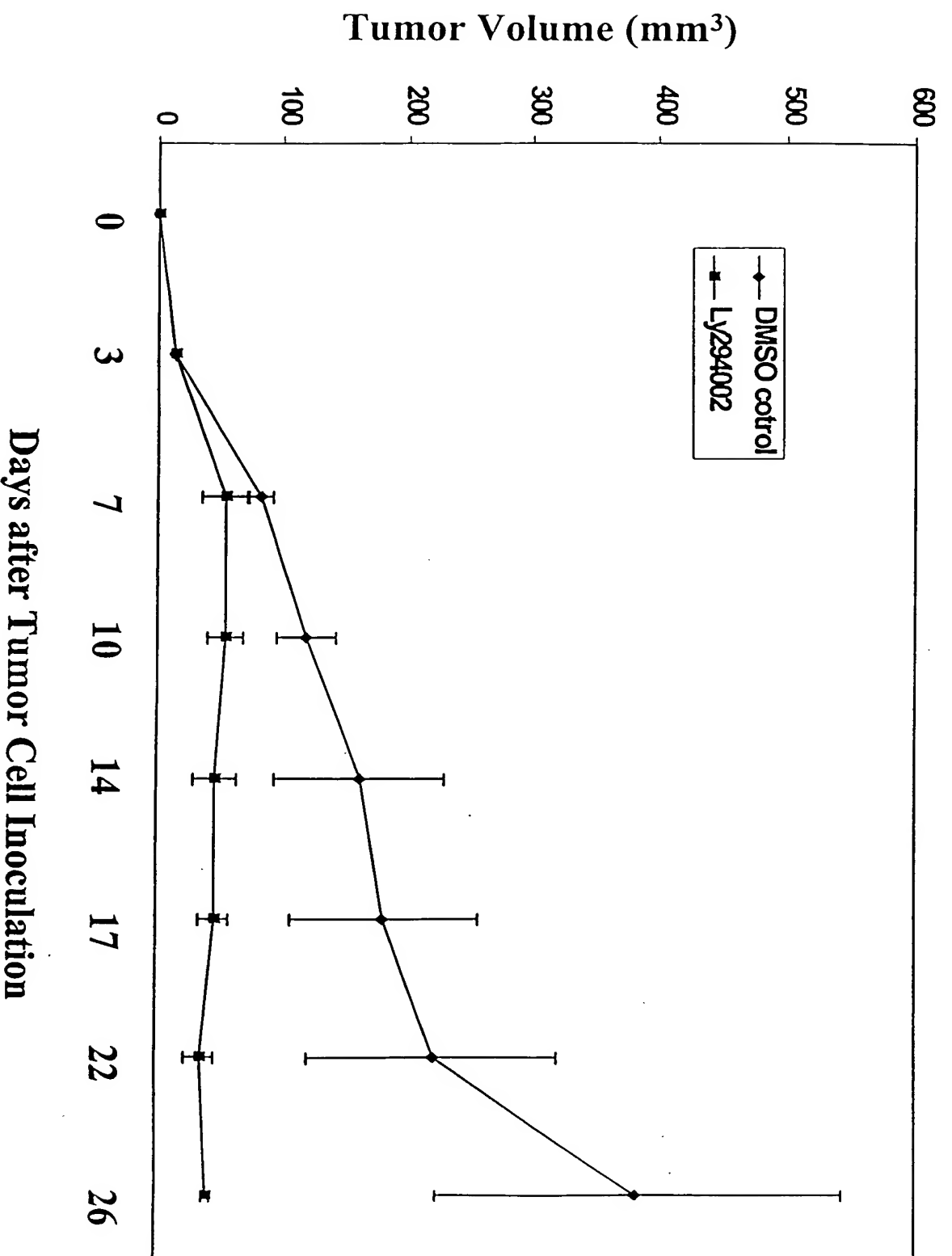


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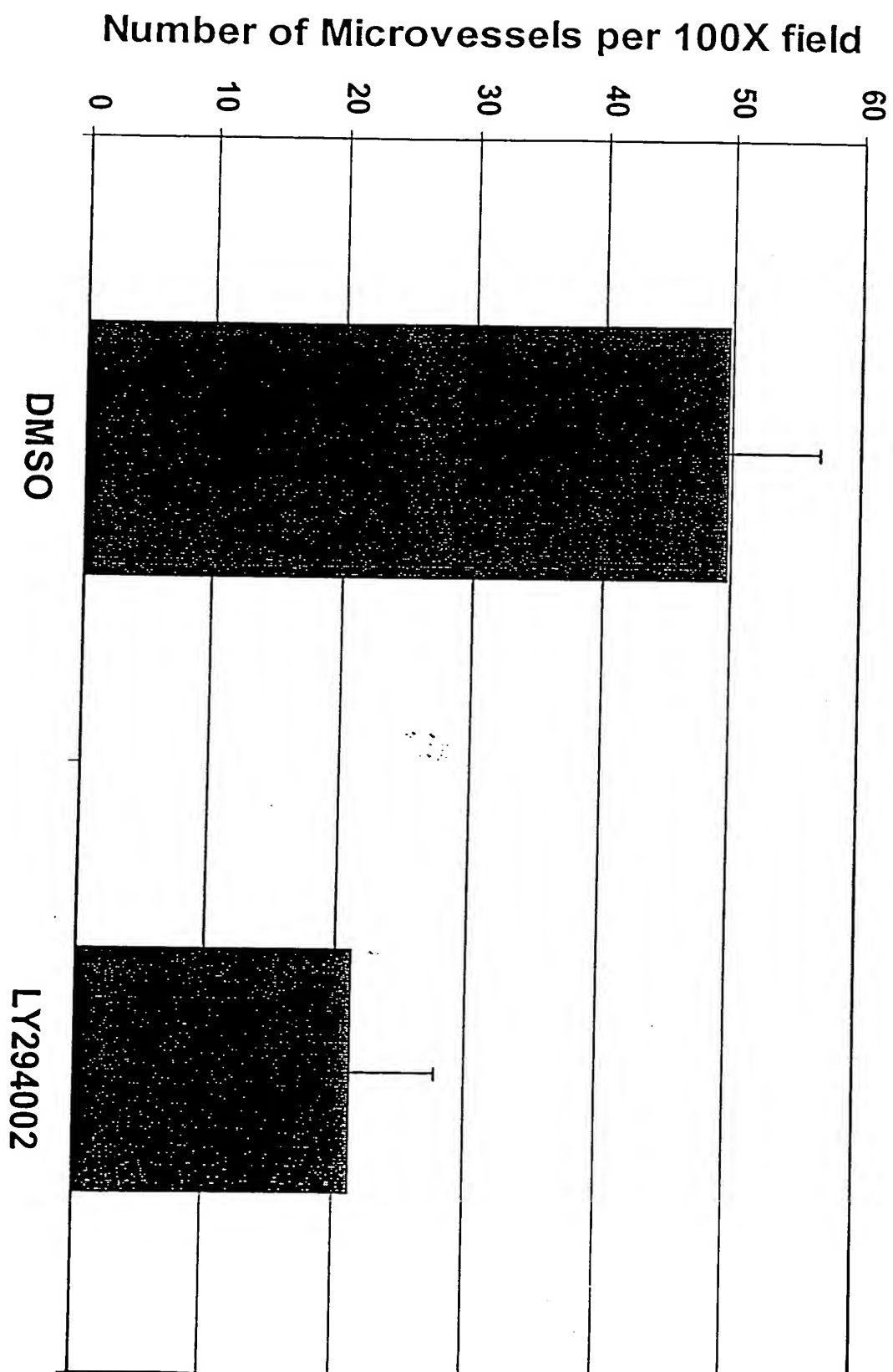


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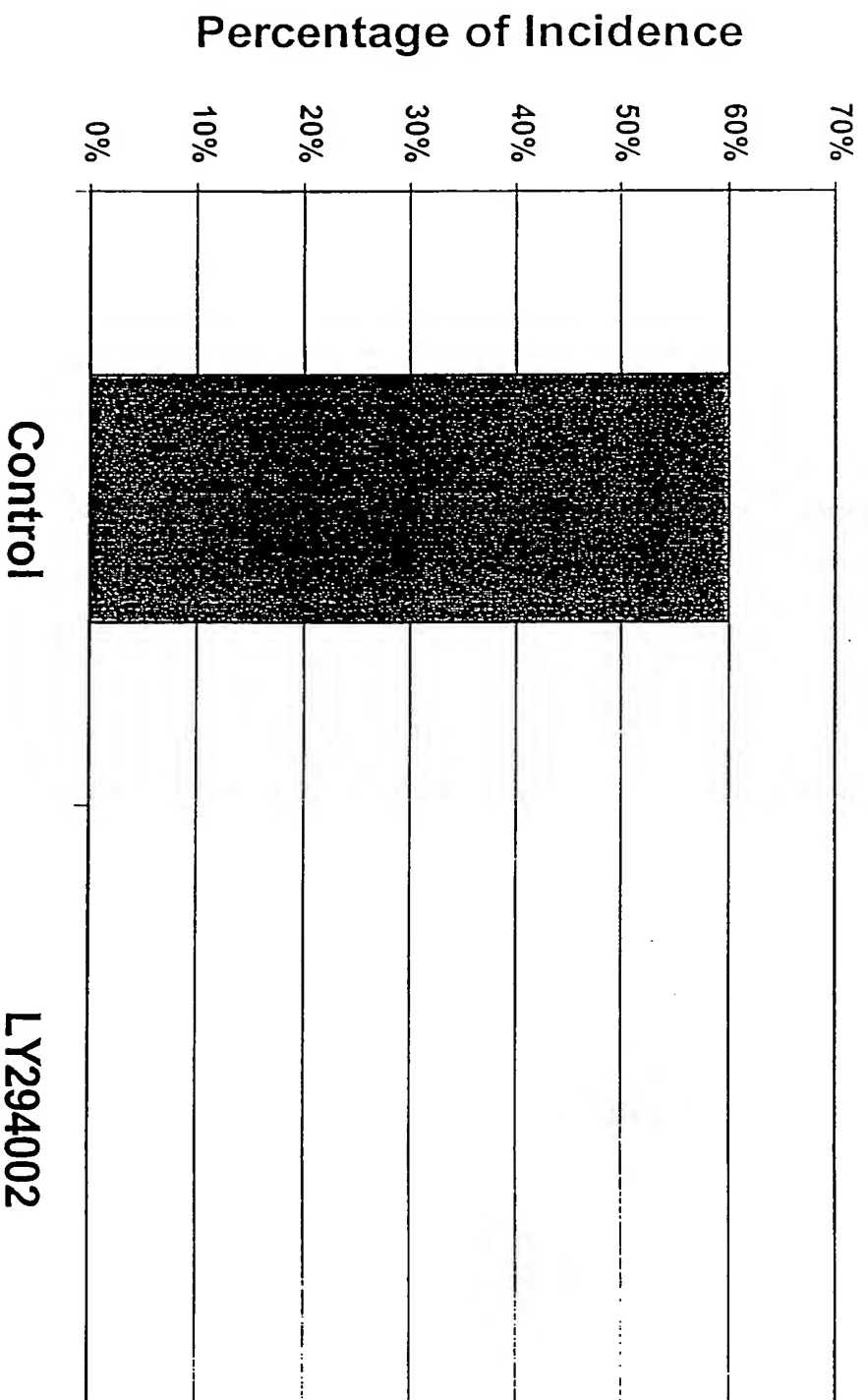


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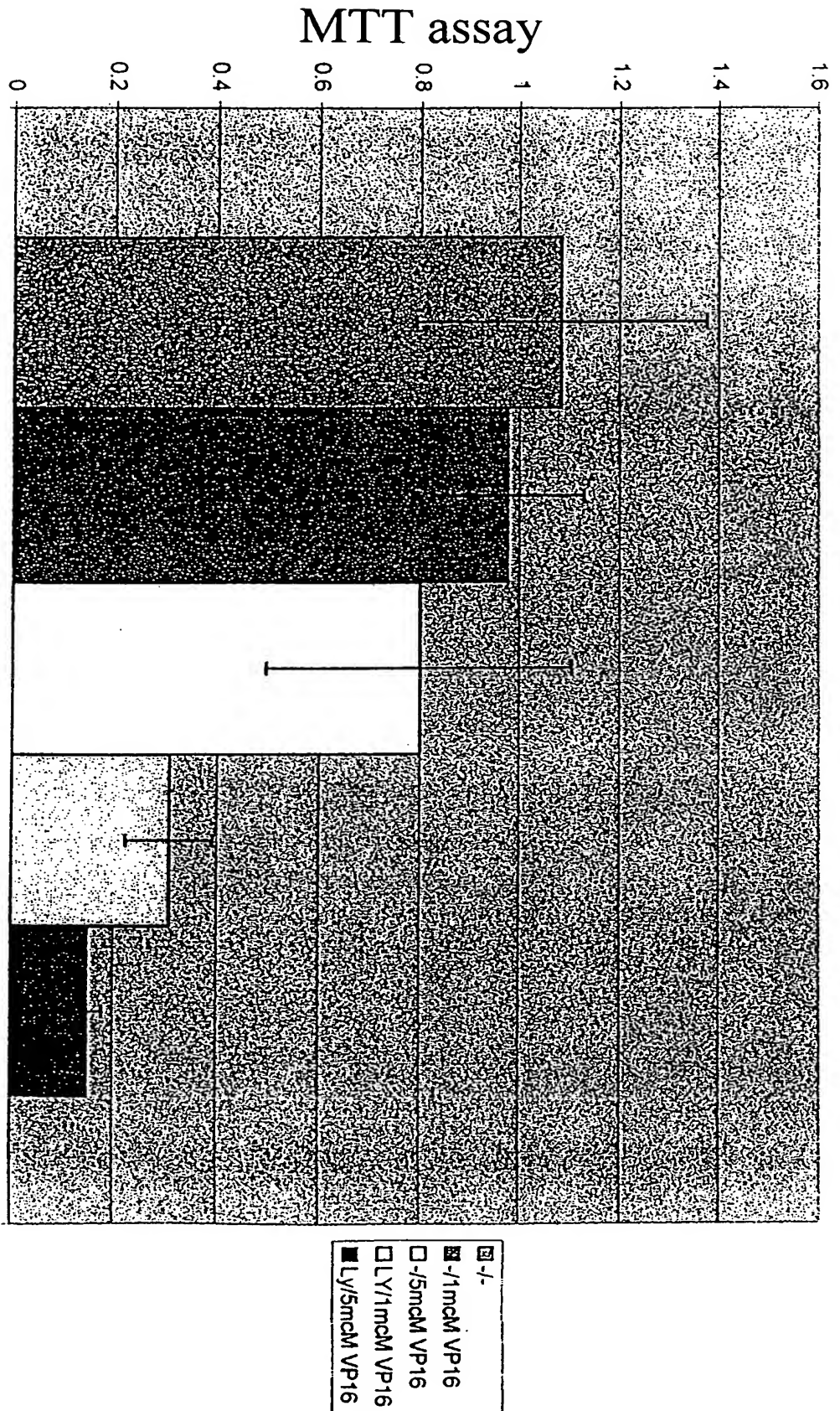


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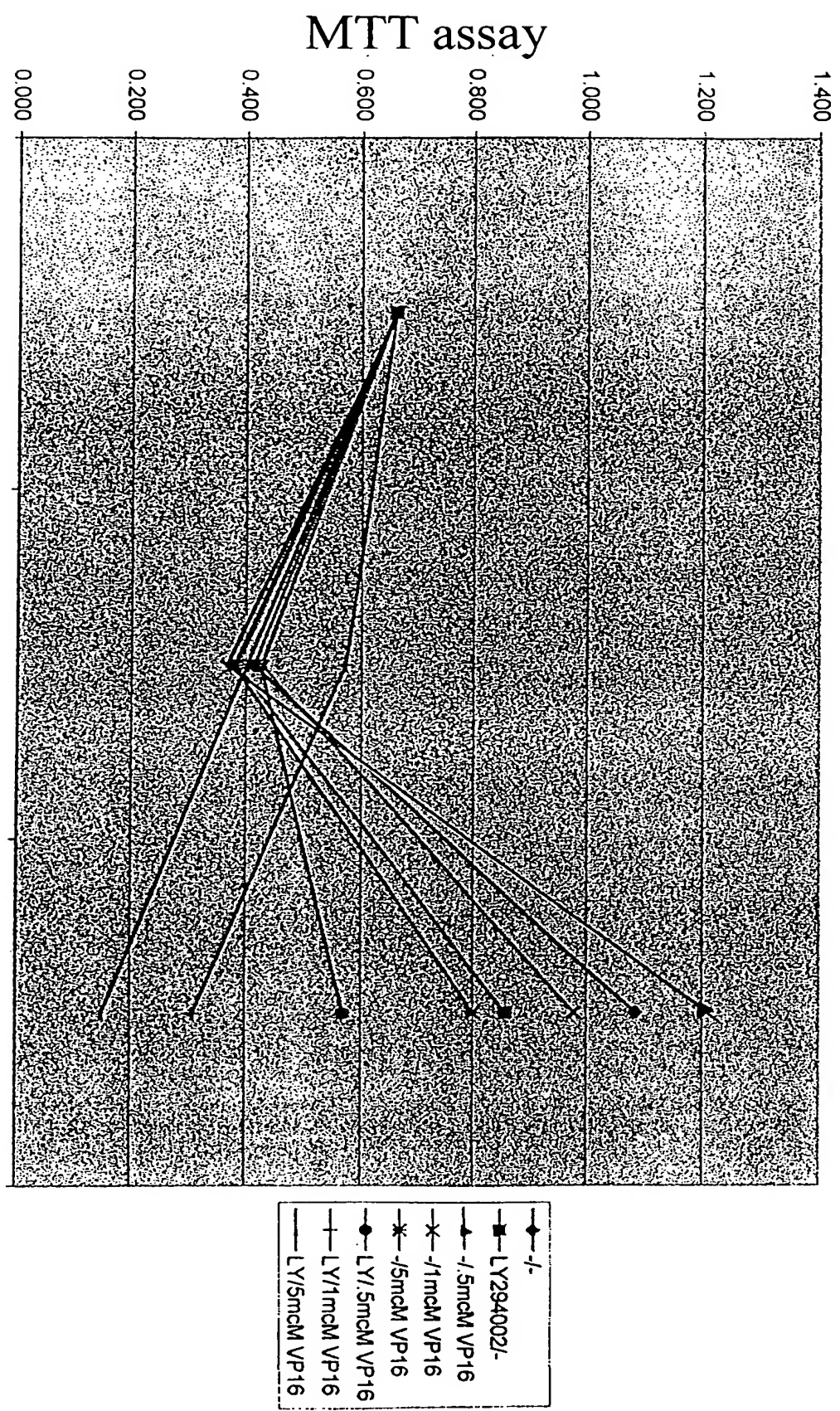
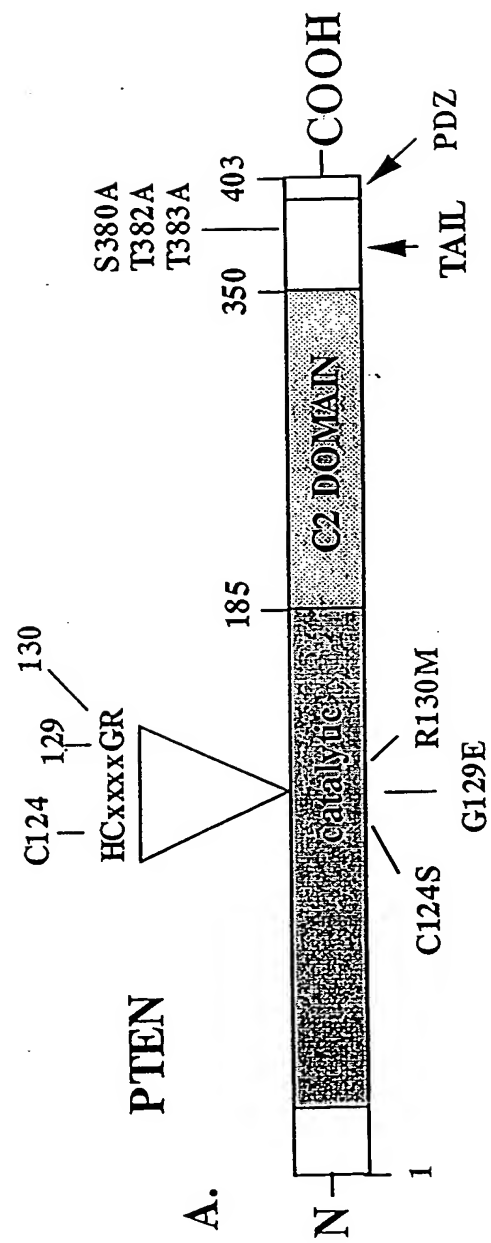


Fig. 20A



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      1760      1770      1780      1790      1800
ACAAAAATGTTTCACCTTTTGGGTAAATACGTTCTTCATACCAGGACCAGAG
TGTTTTACAAAGTGAAAACCCATTTATGCAAGAAGTATGGTCCTGGTCTC
D K M F H F W V N T F F I P G P E>
__HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC__>

                                     >ClaI
                                     |
                                     >BsiXI
                                     |
                                     >BsiQI      >TaqI
                                     |          |
      1810      1820      1830      1840      1850
GAAACCTCAGAAAAAGTGGAAATGGAAGTCTTTGTGATCAGGAAATCGA
CTTTGGAGTCTTTTTCACCTTTTACCTTCAGAAACACTAGTCCTTTAGCT
E T S E K V E N G S L C D Q E I D>
__HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC__>

                                     >RsaI
                                     |
      1860      1870      1880      1890      1900
TAGCATTTCAGTATAGAGCGTGCAGATAATGACAAGGAGTATCTTGATAC
ATCGTAAACGTCATATCTCGCACGTCTATTACTGTTCTCATAGAACATG
S I C S I E R A D N D K E Y L V>
__HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC__>

      1910      1920      1930      1940      1950
TCACCCTAACAAAAACGATCTTGACAAAGCAAACAAAGACAAGGCCAAC
AGTGGGATTGTTTTTTGCTAGAACTGTTTCGTTTGTTCGTCCGGTTG
L T L T K N D L D K A N K D K A N>
__HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC__>

      1960      1970      1980      1990      2000
CGATACTTCTCTCCAAATTTTAAGGTGAACTATACTTTACAAAAACAGT
GCTATGAAGAGAGGTTTAAATTCCTACTTTGATATGAAATGTTTTGTCA
R Y F S P N F K V K L Y F T K T V>
__HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC__>

      2010      2020      2030      2040      2050
AGAGGAGCCATCAAATCCAGAGGCTAGCAGTTCAACTTCTGTGACTCCAG
TCTCCTCGGTAGTTTAGGTCTCCGATCGTCAAGTTGAAGACACTGAGGTC
E E P S N P E A S S S T S V T P>
__HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC__>

                                     >BsiQI
                                     |
      2060      2070      2080      2090      2100
ATGTTAGTGACAATGAACCTGATCATTATAGATATTTCTGACACCACTGAC
TACAACTCACTGTTACTTGGACTAGTAATATCTATAAGACTGTGGTGACTG
D V S D N E P D H Y R Y S D T T D>
__HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC__>

                                     >BscCI
                                     |
      2110      2120      2130      2140      2150
TCTGATCCAGAGAATGAACCTTTTGATGAAGATCAGCATTACAAATTAC

```

Fig. 20B (continued)

CTTCTGCCATCTCTCTCCTCCTTTTCTTCAGCCACAGGCTCCCAGACAT
GAAGACGGTAGAGAGAGGAGGAAAAAGAAGTCGGTGTCCGAGGGTCTGTA

M>

—>

>EcoRV

960 970 980 990 1000
GACAGCCATCATCAAAGAGATCGTTAGCAGAAACAAAAGGAGATATCAAG
CTGTCGGTAGTAGTTTCTCTAGCAATCGTCTTTGTTTTCCTCTATAGTTC
T A I I K E I V S R N K R R Y Q>

___HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC___>

>TaqI

1010 1020 1030 1040 1050
AGGATGGATTTCGACTTAGACTTGACCTATATTTATCCAAATATTATTGCT
TCCTACCTAAGCTGAATCTGAACTGGATATAAATAGGTTTATAATAACGA
E D G F D L D L T Y I Y P N I I A>

___HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC___>

>PstI

1060 1070 1080 1090 1100
ATGGGATTCCTGCAGAAAGACTTGAAGGTGTATACAGGAACAATATTGA
TACCCTAAAGGACGTCTTCTGAACTTCCACATATGTCCTTGTATAACT
M G F P A E R L E G V Y R N N I D>

___HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC___>

1110 1120 1130 1140 1150
TGATGTAGTAAGGTTTGGATTCAAAGCATAAAAACCATTAAGATAT
ACTACATCATTCCAAAAACCTAAGTTTCGTATTTTGGTAATGTTCTATA
D V V R F L D S K H K N H Y K I>

___HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC___>

>PstI

1160 1170 1180 1190 1200
ACAATCTATGTGCTGAGAGACATTATGACACCGCCAAATTTAACTGCAGA
TGTTAGATACACGACTCTCTGTAATACTGTGGCGGTTTAAATTGACGTCT
Y N L C A E R H Y D T A K F N C R>

___HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC___>

1210 1220 1230 1240 1250
GTTGCACAGTATCCTTTTGAAGACCATAACCCACCACAGCTAGAACTTAT
CAACGTGTCATAGGAAAACTTCTGGTATTGGGTGGTGTGATCTTGAATA
V A Q Y P F E D H N P P Q L E L I>

___HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC___>

>BglII

1260 1270 1280 1290 1300
CAAACCCTTCTGTGAAGATCTTGACCAATGGCTAAGTGAAGATGACAATC
GTTTGGGAAGACACTTCTAGAACTGGTTACCGATTCACTTCTACTGTTAG
K P F C E D L D Q W L S E D D N>

___HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC___>

Fig. 20B

1310 1320 1330 1340 1350
 ATGTTGCAGCAATTCACCTGTAAAGCTGGAAAGGGACGGACTGGTGTAATG
 TACAACGTCGTTAAGTGACATTTTCGACCTTTCCCTGCCTGACCACATTAC
 H V A A I H C K A G K G R T G V M>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

1360 1370 1380 1390 1400
 ATTTGTGCATATTTATTGCATCGGGGCAAATTTTAAAGGCACAAGAGGC
 TAAACACGTATAAATAACGTAGCCCCGTTTAAAAAATTTCCGTGTTCTCCG
 I C A Y L L H R G K F L K A Q E A>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

1410 1420 1430 1440 1450
 CCTAGATTTTTATGGGGAAGTAAGGACCAGAGACAAAAAGGGAGTCACAA
 GGATCTAAAAATACCCCTTCATTCTCTGGTCTCTGTTTTCCCTCAGTGTT
 L D F Y G E V R T R D K K G V T>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

1460 1470 1480 1490 1500
 TTCCCAGTCAGAGGCGCTATGTATATTATTATAGCTACCTGCTAAAAAAT
 AAGGGTCAGTCTCCGCGATACATATAATAATATCGATGGACGATTTTTTA
 I P S Q R R Y V Y Y Y S Y L L K N>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

1510 1520 1530 1540 1550
 CACCTGGATTACAGACCCGTTGGCACTGCTGTTTCACAAGATGATGTTTGA
 GTGGACCTAATGTCTGGGCACCGTGACGACAAAGTGTCTACTACAAACT
 H L D Y R P V A L L F H K M M F E>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

1560 1570 1580 1590 1600
 AACTATTCCAATGTTTCAGTGGCGGAACCTTGCAATCCTCAGTTTGTGGTCT
 TTGATAAGGTTACAAGTCACCGCCTTGAACGTTAGGAGTCAAACACCAGA
 T I P M F S G G T C N P Q F V V>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

1610 1620 1630 1640 1650
 GCCAGCTAAAGGTGAAGATATATTCCTCCAATTCAGGACCCACGCGCGG
 CGGTTCGATTTCCACTTCTATATAAGGAGGTTAAGTCCTGGGTGCGCCGCC
 C Q L K V K I Y S S N S G P T R R>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

>RsaI

1660 1670 1680 1690 1700
 GAGGACAAGTTCATGTACTTTGAGTTCCCTCAGCCATTGCCTGTGTGTGG
 CTCCTGTTCAAGTACATGAACTCAAGGGAGTCGGTAACGGACACACACC
 E D K F M Y F E F P Q P L P V C G>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

>EcoRV

1710 1720 1730 1740 1750
 TGATATCAAAGTAGAGTTCTTCCACAAACAGAACAAGATGCTCAAAAAGG
 ACTATAGTTTCATCTCAAGAAGGTGTTTGTCTTGTCTACGAGTTTTTCC
 D I K V E F F H K Q N K M L K K>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

Fig. 20B (continued)

AGACTAGGTCTCTTACTTGGAAAAC TACTTCTAGTCGTAAGTGTTTAATG
S D P E N E P F D E D Q H S Q I T>
____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

2160
AAAAGTCTGA
TTTTCAGACT
K V *>

Fig. 20B (continued)